



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,982	01/16/2004	Stephan Karl Barsun	200313314-1	7914

22879 7590 06/20/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

BUI, HUNG S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,982

Applicant(s)

BARSUN ET AL.

Examiner

Hung S. Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/16/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 7-10 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected restriction invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/06/2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 and 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Steinman et al. [US 6,625,035].

Regarding claims 1-2 and 6, Steinman et al. disclose a multi stage mounting printed circuit board (figure 2), comprising:

- a first printed circuit board (804) for mounting electrical components (figure 8) on;
- a first printed circuit board interface component (818) coupled to the first printed circuit board; and the first printed circuit board interface component for communicatively coupling the first printed board to a second printed board

Art Unit: 2841

(802), being mounted to a pair of card guides, via a second printed circuit board interface component (816); and

- a plurality of printed circuit board extractors (832, 834) coupled to the first printed circuit board, the plurality of printed circuit board extractors for coupling the first printed circuit board to a pair of card guides (810, figure 8).

Regarding claim 3, Steinman et al. disclose wherein the plurality of printed circuit board extractors include a mechanical advantage mechanism for providing a mechanical advantage for securing the first printed circuit board in place in the card guides (figure 8).

Regarding claim 4, Steinman et al. disclose wherein the plurality of printed circuit board extractors include a locking mechanism for locking the first printed circuit board in place in the card guides (figure 8).

Regarding claim 5, Steinman et al. further disclose wherein one of the plurality of printed circuit board extractors include:

- a pivot point for permitting the one of the plurality of printed circuit board extractors to pivot;
- a leverage arm leverage arm for driving the printed circuit board about the pivot point; and
- a latch slot for grabbing a lip on the one of the card guides (figures 8-9).

Regarding claim 11, Steinman et al. disclose a multi stage printed circuit board mounting system (as described in claim 1) being connected to a back plane (314, figure 3).

Regarding claim 12, Steinman et al. disclose the plurality of multi stage mounting printed circuit boards are mounted in the plurality of card guides (figure 8).

Regarding claims 13-14, Steinman et al. disclose one of the plurality of multi stage mounting printed circuit boards is removable separate from another one in an electronic system (figures 1, 3 and 10a).

Regarding claim 15, Steinman et al. disclose wherein each one of the plurality of multi stage mounting printed circuit boards includes: a first printed circuit board (804) for mounting electrical components (figure 8) on; a first printed circuit board interface component (818) coupled to the first printed circuit board; and the first printed circuit board interface component for communicatively coupling the first printed board to a second printed board (802) via a second printed circuit board interface component (816); and a plurality of printed circuit board extractors (832, 834) coupled to the first printed circuit board, the plurality of printed circuit board extractors for coupling the first printed circuit board to a single pair of card guides (810, figure 8).

Regarding claim 16, Steinman et al. disclose wherein the plurality of printed circuit board extractors include a mechanical advantage mechanism for providing a mechanical advantage for securing the first printed circuit board in place in the card guides (figure 8).

Regarding claims 17 and 20, Steinman et al. disclose wherein the leverage mechanism grabs a lip on the chassis to provide force for inserting/extracting the each respective one of the plurality of multi state mounting printed circuit boards into or out of the chassis (figures 2-3).

Art Unit: 2841

Regarding claim 18, Steinman et al. disclose wherein the plurality of printed circuit board extractors include a locking mechanism for locking the first printed circuit board in place in the card guides (figure 8).

Regarding claim 19, Steinman et al. further disclose wherein one of the plurality of printed circuit board extractors include:

- a pivot point for permitting the one of the plurality of printed circuit board extractors to pivot;
- a leverage arm for driving the printed circuit board about the pivot point; and
- a latch slot for grabbing a lip on the one of a guides of the chassis (figures 2-3 and 8-9).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ravid [US 5,031,074] discloses a circuit board guide and inter-fitting device;
- Mann, Jr. et al. [US 4,840,570] disclose a plug in card module;
- Rietze et al. [US 6,940,482] disclose common boot environment for a modular system;
- DeCesare et al. [US 6,950,311] disclose a telecommunication switch server;
- Liu [US 6,511,139] discloses a modularized industrial console; and

Art Unit: 2841

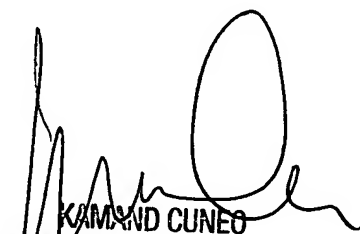
- Marler [US 6,822,874] discloses modular high availability electronic product architecture.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/10/06
Hung Bui
Art Unit 2841


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800